

Mobile Coverage Programme Discussion Paper Submission Cover Sheet

Submission Information	
This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper.	
Contact Details	
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Date:	28/2/2014
Confidentiality and privacy	
<p>All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests.</p> <p>Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.</p> <p>Do you want all or parts of the submission to be treated as confidential? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p><i>If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):</i></p> <div style="border: 1px solid black; height: 40px; width: 100%; margin-top: 5px;"></div>	
<p>If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:</p>	
Submission Instructions	
<p>Submissions are to be made by 5:00pm (AEST) Friday 28 February 2014.</p> <p>Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based formats via the email address mobilecoverage@communications.gov.au</p> <p>Alternatively, submissions can be sent to the postal address below (to arrive by the due date):</p> <div style="text-align: center; margin-top: 10px;"> <p>The Manager Mobile Coverage Programme Department of Communications GPO Box 2154 CANBERRA ACT 2615</p> </div> <p>All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.</p>	



Australian Government
Department of Communications

Mobile Coverage Programme

Discussion Paper Submission



Camouflage Communications Pty Ltd

Discussion Question and Answer**1. Would an appropriate minimum quality standard be that base stations must provide high-speed 4G LTE mobile broadband data communication services and also high quality 3G mobile voice and broadband data services? If this is not an appropriate minimum quality standard, what is?**

Camouflage Communications Pty Ltd (CamCom) is an Australian tower owner and third party developer of shared wireless network infrastructure, building a portfolio of concealed tower assets across Australia. CamCom '2nd generation' concealed towers allow carriers network expansion access in previously inaccessible and sensitive urban locations, without compromising site antenna capacity. CamCom operates in Australia as the exclusive partner of US based Solar Communications Inc (SCI), a multi-service provider to the US telecommunications network infrastructure market. CamCom works with mobile carriers and their consultants to provide high capacity solutions to appropriate sites where capacity challenges and community concern with impacts on visual amenity arise. In light of this, to question one CamCom would add that consideration be given to the physical equipment hosting capacity of structures in the minimum quality standard of base stations – to both build for current needs and future network capacity requirements under heavy loading multi-carrier scenarios.

2. What are the most appropriate indicators that could be used to specify the minimum quality standards that should apply to the mobile services being provided through the programme? For instance, should it be a minimum received service signal indication (RSSI) in decibel-milliwatts (dBm)? A similar approach was adopted recently in the UK where a comparable programme specified a minimum RSSI for 3G voice and basic data service of -85dBm on roads and -75dBm in community areas (outside premises).

As a physical infrastructure builder and asset owner only, CamCom wishes to provide no specific guidance on minimum quality standards with regard to mobile service provision.

3. Does delivery option 2 for the \$80 million Mobile Network Expansion component raise any additional issues that need to be considered?

CamCom would only highlight the added administrative complexity of option 2, and subsequent delays in tangible network delivery outcomes.

4. Could options 3(a) or 3(b) for the \$80 million Mobile Network Expansion Project be delivered in conjunction with options 1 or 2 to enable network infrastructure providers to compete with MNOs?

CamCom can envisage multiple scenarios incorporating elements of both option 3(a) and 3(b) for the MNEP in conjunction with options 1 or 2. Consideration to scenarios incorporating option 3(a) should in CamCom's opinion, allow potential staging or partnerships post approvals to include feedback from carriers on preferences regarding backhaul capabilities and requirements.

MNO's installing their own equipment on a commercial basis provides a strong maximisation of competition benefits through an emphasis for network infrastructure providers to provide 'high capacity' sites. Hosting multiple MNO's maximises community benefit and subsequently providing the highest return on government investment. CamCom's business model provides structures specifically designed to achieve this outcome, whilst minimising the impact on the visual amenity of the tower location. CamCom acknowledges that in remote and some target sites for the MNEP and the MBSP such impact will be of little concern to residents, however in other locations CamCom possesses a unique product and skill set to provide a solution suitable to all

stakeholders.

5. Should bidders be able to propose to incorporate the use of base stations owned by NBN Co as part of their bid?

CamCom holds no strong views on question 5, however supports an outcome which reduces unnecessary tower proliferation.

6. Should a joint bid (between a specialist network infrastructure provider and a MNO) be permitted? Should it be encouraged?

CamCom believes joint bids should be permitted and encouraged. Further to this, flexibility will need to be incorporated into the subsequent site assessment procedure to allow for modification or tailoring of proposals to include local and contextual issues to sites. An example of this may be the use of a concealed structure to provide both better siting of the tower to optimise coverage, and to reduce the visual impact of the tower. Flexibility for MNO's and infrastructure providers to work together on site specific projects would allow this option to remain open at all times.

7. Is it realistic to expect specialist network infrastructure providers to provide backhaul (recognising that they would presumably need to contract with a third party to provide this)?

Whilst not unachievable, by 'playing to strengths' and contributing to working partnerships in respective areas of delivery strength, MNO's and specialist network infrastructure providers such as CamCom will provide optimal outcomes from a network coverage and return on investment for government. As a specialist network infrastructure provider, CamCom would prefer not to hold an expectation to provide or contract in services capable to deliver backhaul.

8. Is option 3(b) suitable for Australia's regional mobile market?

CamCom questions the suitability of option 3(b) for Australia's regional mobile market and would highlight the added administrative and operational complexity of this option, and subsequent delays in tangible network delivery outcomes.

9. What are the appropriate specifications for a base station to be able to accommodate at least two other MNOs?

CamCom would look forward to sharing additional materials and supporting technical information regarding appropriate specifications for multi-tenancy scenarios. CamCom/SCI towers operational in the USA currently host 5 mobile carriers.

10. Will the proposed open access provisions be sufficient to encourage other MNOs to use the base stations to provide mobile services?

Conscious of the regional geographic focus elements of the MNEP the proposed provision may need to be widened, however CamCom believes that the sites likely to fall under the Mobile Black Spot project budget will need far less modification given the extraordinary demand profile seen at many soon to be proposed locations (seasonal/high demand areas) and subsequent interest from MNO's to better cater to these locations.

11. Should MNOs be required to pre-commit to/co-invest in the base stations for which they wish to share infrastructure?

Commercial certainty will become necessary via pre-commitment from MNO's to share infrastructure space, to alleviate outcome risk to the government from a co-funding perspective and individually to mitigate risk in attracting interest from network infrastructure developers. CamCom believes co-investment should not be mandated.

12. What is the estimated additional cost of requiring all new base stations to meet the

open access requirements?

The additional costs incurred will depend on the additional amount of capacity required on the structure beyond its original base level of capacity. CamCom provides tower solutions which meet the open access requirements, but in addition also provides solutions which up to double this requirement – completed in a model which provides a superior network performance outcome for a MNO and far superior aesthetic outcome to the wider community. Additional elements of cost will be shared across engineering, fabrications, installation and maintenance buckets and operate beyond a linear increase in cost per additional MNO.

13. Should the proposed open access provisions be applicable to base stations funded under the \$20 million component, or should there be scope to exclude some base stations from these requirements?

CamCom strongly encourages that open access provisions be made applicable to the \$20m funding component for forward looking network demand reasons. Without exception, the mobile networks of MNO are continuing to be strained under unprecedented growth in mobile data usage, and foresight and demand profiling is being included in provisions for all towers built in the private sector – This should (especially in rapidly growing and peak demand areas of the \$20m funding component) be considered under any government funded programs.

14. What are the most appropriate models/benchmarks for establishing access and backhaul pricing, and for reflecting in that pricing the value of the public funding received by the owner of the facilities (such that access seekers receive an appropriate discount from the market price for access to the facility)?

Appropriate benchmarks for establishing access pricing should include and be not limited to are limited however factors to consider in such discussion should include – the capacity provided, location from which the service is provided (market forces will attribute higher value to strongly preferential locations if achieved from a network coverage perspective) and the tenor or service provision.

15. Do the proposed assessment criteria achieve the right balance to deliver the best value for money outcomes?

CamCom is supportive of the proposed assessment criteria – with regard to best value for money outcomes, CamCom would like to see a contextual evaluation of the proposed locations included and whether with a second generation concealed structure at an alternate previously inaccessible location would provide a better network outcome and subsequent ‘value for money’ outcome. CamCom wishes that its proposition and concept be viewed through the lens of its towers equipment hosting capacity advantages rather than primarily as an aesthetic solution.

16. Should the proposed assessment criteria be weighted, and if so, how?

CamCom believes areas of highest priority and weighing should be attributed to: matching priority programs with locations, co-contributions and open access benefit as under each of these criteria commercial elements are balanced with service provision need, whilst incentivising private investment to complement and de-risk government investment via co-contribution.

17. Is there a more effective means of assessing seasonal demand than proposed in criterion 3(c)?

Due to the dynamic and evolving nature of demand profiles, the means by which ‘seasonal demand’ is assessment becomes inherently challenging – CamCom is comfortable with this method.

18. To what extent would the use of the NBN fixed wireless network result in improved mobile coverage outcomes in regional Australia?

Depending on the structure choices and geographic location of NBN fixed wireless towers significant improvements should be achievable to mobile coverage outcomes in regional Australia via use of NBN towers. Foresight and planning around additional site loading scenarios would remain as an integral element of any success –involvement via private enterprise would again align interests of the community and regional community mobile users via improved coverage outcomes.

19. How best can a greater role for NBN Co improve competition and choice for consumers in regional Australia?

Given the remote nature of the majority of NBN fixed wireless structures, CamCom would in many cases question the need for wide-ranging choice of coverage, and counter with a focus on basic provision of service as a core priority – conscious that competition and choice would always be preferable, however in many remote scenarios may not be commercially viable.

20. In addition to base station location, design and backhaul access, what other considerations would NBN Co need to take into account if it were to also support mobile coverage and competition benefits as part of its mandate?

CamCom believes tower site location and best case outcomes from a network coverage perspective via the use of concealed structures (only where appropriate – conscious of remote nature of large majority of NBN structures) should receive consideration, in addition to the significant considerations listed prior.

21. How can early engagement between NBN Co and MNOs be facilitated in the design of each base station? Is there a role here for the Australian Mobile Telecommunications Association (AMTA)?

Early engagement would support a positive relationship between NBN co and MNO's, however commercial imperative would in the majority of cases drive outcomes and involvement from the private sector. The AMTA could potentially act as a facilitator to such discussions, however standard practices such as benchmarked design principles would again improve the likelihood of a favourable outcome.

22. How can the Mobile Coverage Programme best complement any role that the NBN fixed wireless service plays in improving mobile coverage and competition?

As per previous answers, any funds deployed under a government co-funding model should seek complement private sector expertise and funding in developing broad scale coverage as a priority in locations which currently lack access – by developing a core physical network via the NBN fixed wireless service, competition and marginal cost of wider network coverage service via existing MNO's improves the economics of additional MNO investment, and subsequently should provide a better competitive landscape in remote areas.